

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

1 / 36

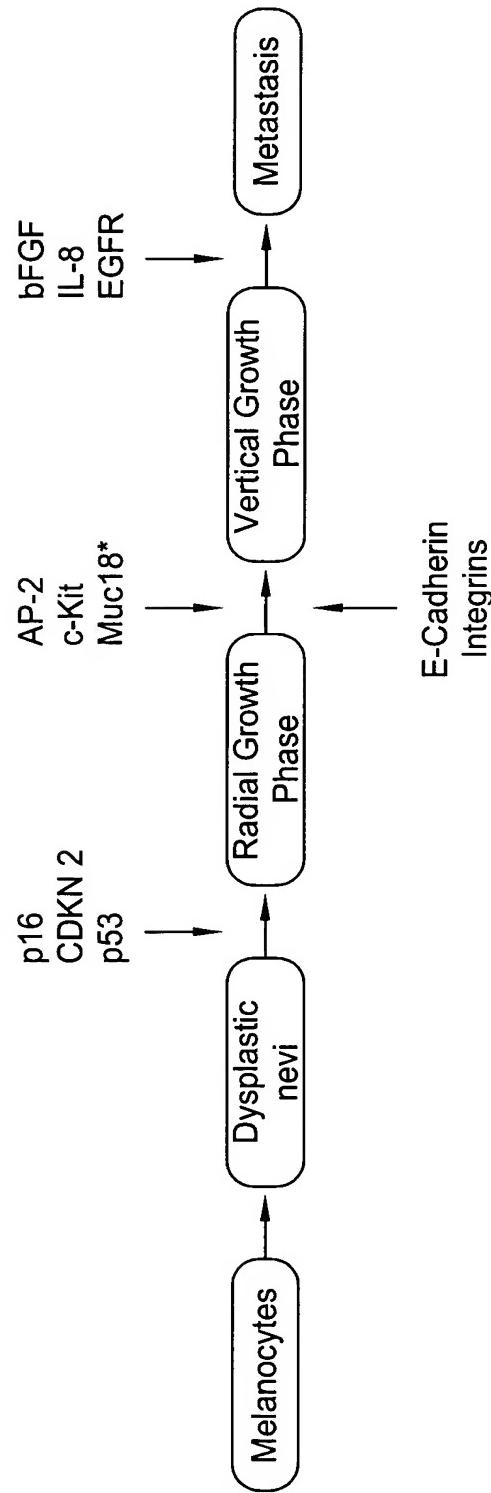


FIG. 1

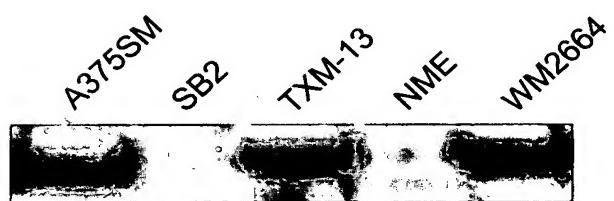


FIG. 2

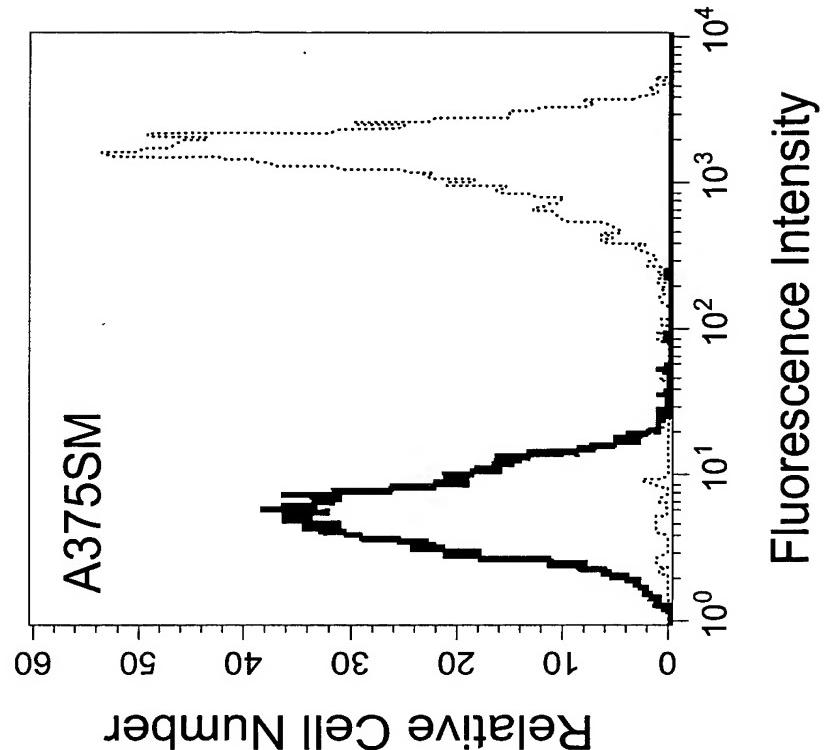


FIG. 3B

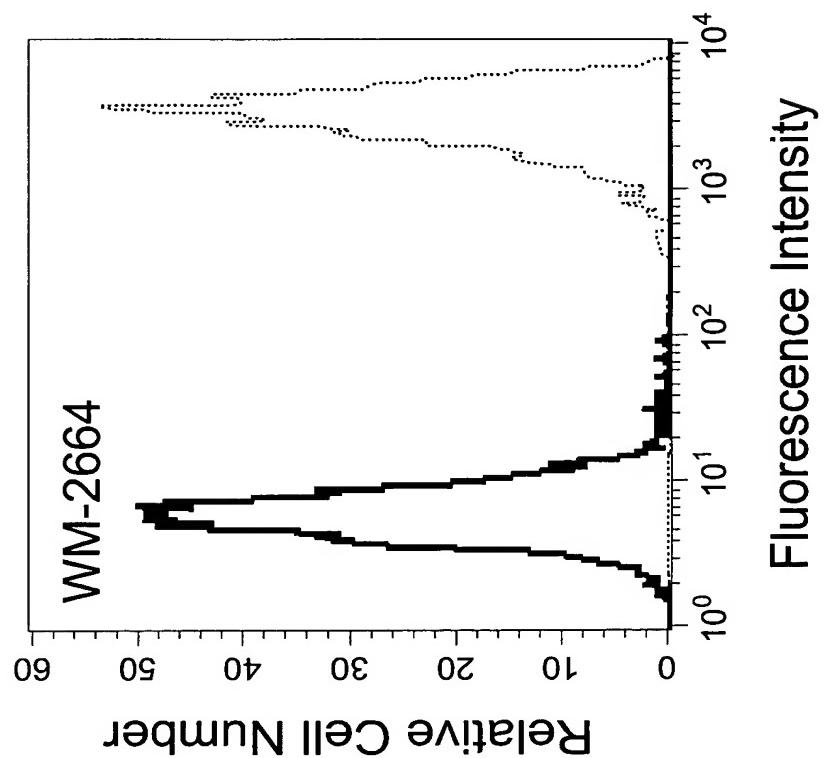


FIG. 3A

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030CI

4 / 36

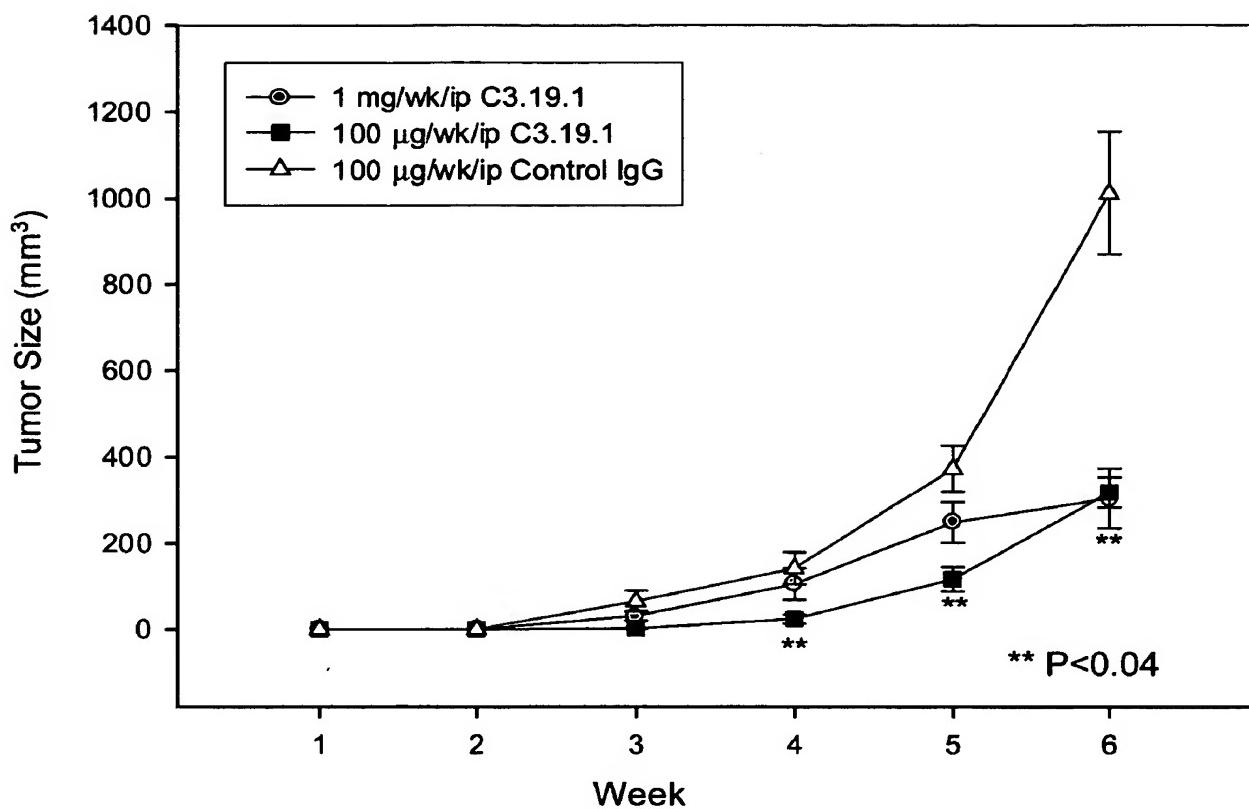


FIG. 4

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030CI

5 / 36

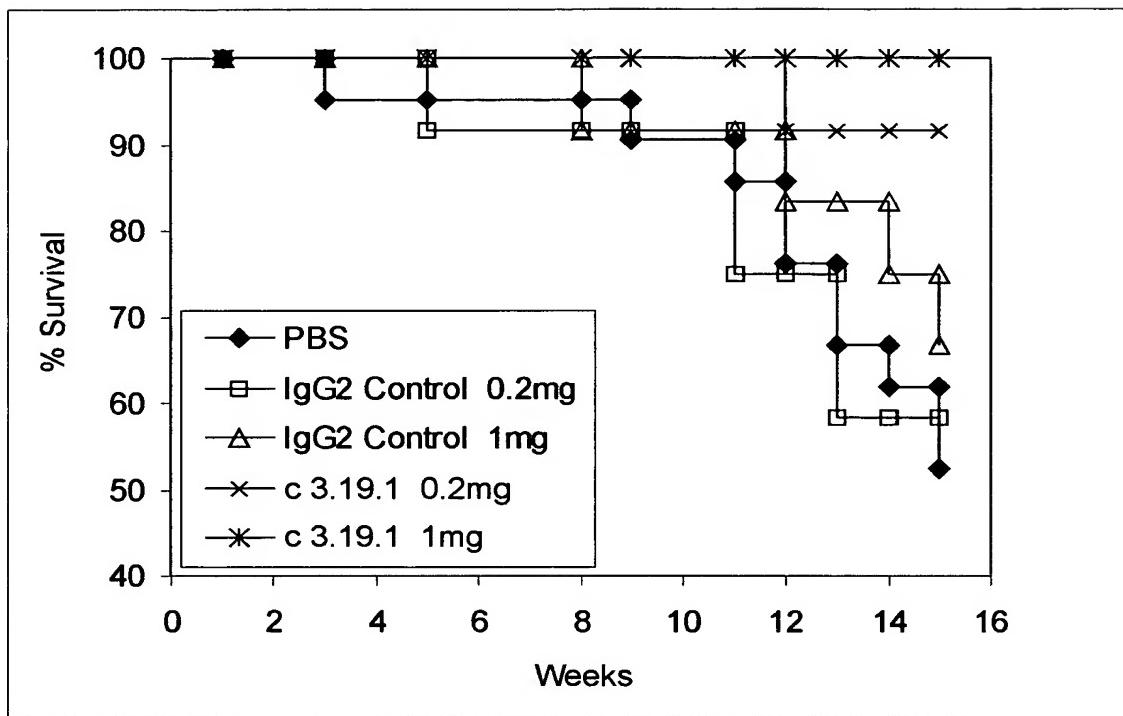


FIG. 5

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

6 / 36

ANTI-MUC18 ANTIBODY C3.19.1

Nucleotide Sequence of Heavy Chain Variable Region

5' -

CAGGTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTCGGAGACCCTGTCCTCACCTGC
ACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCCAGGGAAGGGA
CTGGAGTGGATTGGCTATATCTATTACACTGGACCTCAAACAAACCCCTCCCTCAAGAGTCGC
GTCACCATATCAGTGGACACGTCCAAAAACCAAGTTCTCCCTGAGGCTGAGTTCTGTGACCGCTGCG
GACACGGCCGTTTATTACTGTGCGAGAGATCAGGGCAGTGGTTACTACCCGATGCTTTGATATC
TGGGGCCAAGGGACAATGGTCACCGTCTTCAG 3' (SEQ ID NO: 3)

Amino Acid Sequence of Heavy Chain Variable Region

QVQLQESGPGLVKPSETSLTCTVSGGSISYYWSWIRQPPKGLEWIGYIYTWTSNYNPSLCSR
VTISVDTSKNQFSRLSSVTAADTAVYYCARDQGQWLLPDAFDIWGQGTMVTVSS (SEQ ID NO:1)

Nucleotide Sequence of Light Chain Variable Region

5' -

GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCGTACCCCTGGAGAGCCGGCCTCCATCTCC
TGCAGGTCTAGTCAGAGCCTCCTGCGTAGTAATGGATAACAATTTGGATTGGTACCTGCAGAAG
CCAGGACAGTCTCCACATCTCCTGATCTATTGGTTCTAATCGGGCCTCCGGGGTCCCTGACAGG
TTCAGTGGCAGTGGATCAGGCACAGATTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTT
GGGGTTTATTACTGCATGCAAGCTAACAAAGTCCGATCACCTCGGCCAAGGGACACGACTGGAG
ATTAAAC 3' (SEQ ID NO: 4)

Amino Acid Sequence of Light Chain Variable Region

DIVMTQSPLSLPVTPGEPASISCRSSQSLLRSNGNYLDWYLQKPGQSPHLLIYLGSNRASGV PDR
FSGSGSGTDFTLKISRVEADVGVYYCMQAQQSPITFGQGTRLEIK (SEQ ID NO: 2)

FIG. 6

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

7 / 36

ANTI-MUC18 ANTIBODY C6.11.13

Nucleotide Sequence of Heavy Chain Variable Region

5' -

CAGGTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTCACAGACCCTGCCCTCACCTGC
ACTGTCTCTGGTGGCTCCATCAGCAGTGGTACCTACCACTGGAGCTGGATCCGCCAGCACCCAGGG
AAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGAGCACCTACTACAACCCGCCCTCAAG
AGTCGAGTTACCATATCAGTAGACACGTCTAAGAACCAAGTCTCCCTGAAGCTGAGCTGTGACT
GCCGCAGACACGCCGTGTATTACTGTGCAGAGAGGGGAGATGGCTACAAGTACTGGGCCAGGGA
ACCCTGGTCACCGCTCCCTCAG-3' (SEQ ID NO: 7)

Amino Acid Sequence of Heavy Chain Variable Region

QVLOQESGPGLVKPSQTLSLTCTVSGGSISSSGYHWSWIROHPGKGLEWIGYIYYSGSTYYNPSLK
SRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGGDGYKYWGQGTLTVSS (SEQ ID NO: 5)

Nucleotide Sequence of Light Chain Variable Region

5'

GAAATAGTGATGACGCAGTCTCCAGCCACCCCTGTCTGTCTCCAGGGGAAAGAGCCACCCCTCTCC
TGCAGGGCCAGTCAGAGTGTAGCAACAACTTAGCCTGGTATCAGCAGAAACCTGGCCAGGCTCCC
AGGCTCCTCATCTATGGTGCATCCACCAGGGCACTGGTATCCCAGCCAGGTTCACTGGCAGTGGG
TCTGGGACAGAGTTCACTCTCACCACAGCAGCCTGCAGTCTGAAGATTTGCAGTTATTACTGT
CAGCAGTATAATAACTGGCCTCGGACGTTGGCCAAGGGACCAAGGTGGAAATCAAAC 3'
(SEQ ID NO: 8)

Amino Acid Sequence of Light Chain Variable Region

EIVMTQSPATLSVSPGERATLSCRASQSVNNLAWYQQKPGQAPRLLIYGASTRATGIPARFSGSG
SGTEFTLTISLQSEDFAVYYCQQYNNWPRTFGQGTKVEIK (SEQ ID NO: 6)

FIG. 7

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

8 / 36

ANTI-MUC18 ANTIBODY C3.10

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGCAGGAGTC GGGCCAGGA CTGGTGAAGC CTTCGGAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAGT AGTTACTACT GGAGCTGGAT CCGGCAGGCC
121 CCAGGGAAGG GACTGGAGTG GATTGGCTAT ATCTATTACA CTTGGACCAC CAACTACAAAC
181 CCCTCCCTCA AGAGTCGCGT CACCATATCA GTGGACACGT CCAAGAACCA GTTCTCCCTG
241 AGGCTGAGCT CTGTGACCGC TGCGGACACG GCCCTTTATT ACTGTGCGAG AGATCAGGGG
301 CAGTGGTTAC TACCCGATGC TTTTGATATC TGGGGCCAAG GGACAATGGT CACCGTCTCT
361 TCAG (SEQ ID NO: 11)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLQESGPG LVKPSETLSL TCTVSGGSIS SYYWSWIROQ PGKGLEWIGY IYYTWTTNYN
61 PSLKSRTVTIS VDTSKNQFSL RLSSVTAADT ALYYCARDQG QWLLPDAFDI WGQGTMVTVS
121 S (SEQ ID NO: 9)

Nucleotide Sequence of Light Chain Variable Region

1 GACATCCAGA TGACCCAGTC TCCATCCTCC CTGTCTGCAT CTGTAGGAGA CAGAGTCACC
61 ATCACTTGCC GGGCAAGTCA GAGCATTAGC AACTATTAA ATTGGTATCA GCAGAAACCA
121 GGAAAAGCCC CTAAGCTCCT GATCTATGGT GCATCCAGTT TGCAAAGTGG GGTCCCATCA
181 AGGTTCAGTG GCAGTGGATC TGGGACAGAT TTCACTCTCA CCATCAGCAG TCTGCAACCT
241 GAAGATTTG CAACCTACTA CTGTCGACAG AGTTACAGTA CCCCTCCGGA GTGCAGTTT
301 GGCCAGGGGA CCAAGCTGGA GATCAAAC (SEQ ID NO: 12)

Amino Acid Sequence of Light Chain Variable Region

1 DIQMTQSPSS LSASVGDRVT ITCRASQSIS NYLNWYQQKP GKAPKLLIYG ASSLQSGVPS
61 RFSGSGSGTD FTLTISSLQP EDFATYYCRQ SYSTPPECSF GQGTKLEIK (SEQ ID NO:10)

FIG. 8

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

9 / 36

ANTI-MUC18 ANTIBODY C3.22

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGCAGGAGTC GGGCCCAGGA CTGGTGAAGC CTTCACAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAGC AGTGGTGGTT ACTACTGGAC TTGGATCCGC
121 CAGCACCCAG GGAAGGGCCT GGAGTGGATT GGGTTCATCT ATTACAGTGG GAGCACCTAC
181 TACAACCCGT CCCTCAAGAG TCGAGTTACC ATATCAGTAG ACACGTCTAA GAACCAGTTC
241 TCCCTGAAGC TGAGCTCTGT GACTGCCGCG GACACGCCG TGTATTACTG TGCGAGAGAG
301 GGAGATGGCT TTGACTACTG GGGCCAGGGA ACCCTGGTCA CCGTCTCCTC AG
(SEQ ID NO: 15)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLQESGPG LVKPSQTLSL TCTVSGGSIS SGGYYWTWIR QHPGKGLEWI GFIYYSGSTY
61 YNPSLKSRTV ISVDTSKNQF SLKLSSVTAA DTAVYYCARE GDGF DYWGQG TLTVVSS
(SEQ ID NO: 13)

Nucleotide Sequence of Light Chain Variable Region

1 GACATCCAGA TGACCCAGTC TCCATCCTCC CTGTCTGCAT CTGTAGGAGA CAGAGTCACC
61 ATCACTTGCC GGGCAAGTCA GGGCATTAGA AATGATTAG GCTGGTATCA GCAGAAACCA
121 GGGAAAGCCC CTAAGCGCCT GATCTATGCT GCATCCAGTT TGCAAAGTGG GGTCCCATCA
181 AGGTTCAGCG GCAGTGGATC TGGGACAGAA TTCACTCTCA CAATCAGCAG CCTGCAGCCT
241 GAAGATTTG CAACTTATTA CTGTCTACAG CATAATAGTT ACCCGCTCAC TTTCGGCGGA
301 GGGACCAAGG TGGAGATCAA AC (SEQ ID NO: 16)

Amino Acid Sequence of Light Chain Variable Region

1 DIQMTQSPSS LSASVGDRVT ITCRASQGIR NDLGWYQQKP GKAPKRLIYA ASSLQSGVPS
61 RFSGSGSGTE FTLTSSLQP EDFATYYCLQ HNSYPLTFGG GTKVEIK (SEQ ID NO: 14)

FIG. 9

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

10 / 36

ANTI-MUC18 ANTIBODY C3.27

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGCAGGAGTC GGGCCCAGGA CTGGTGAAGC CTTCGGAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAGT AGTTACTACT GGAGCTGGAT CCGGCAGCCC
121 CCAGGGAAGG GACTGGAGTG GATTGGCTAT ATCTATTACA CTTGGACCTC CAACTACAAC
181 CCCTCCCTCA AGAGTCGCGT CACCATAATCA GTGGACACGT CCAAGAACCA GTTCTCCCTG
241 AGGCTGAGTT CTGTGACCGC TGCGGACACG GCCGTTACT ACTGTGCGAG AGATCAGGGG
301 CAGTGGTTAC TACCCGATGC TTTTGATATC TGGGGCCAAG GGACAATGGT CACCGTCTCT
361 TCAG (SEQ ID NO: 19)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLQESGPG LVKPSETLSL TCTVSGGSIS SYYWSWIRQP PGKGLEWIGY IYYTWTSNYN
61 PSLKSRSVTIS VDTSKNQFSL RLSSVTAADT AVYYCARDQG QWLLPDAFDI WGQGTMVTVS
121 S (SEQ ID NO: 17)

Nucleotide Sequence of Light Chain Variable Region

1 GACATCCAGA TGACCCAGTC TCCATCCTCC CTGTCTGCAT CTGTAGGAGA CAGAGTCACC
61 ATCACTTGCC GGGCAAGTCA GGGCATTAGA AATGATTAG GCTGGTATCA GCAGAAACCA
121 GGGAAAGCCC CTAAGCGCCT GATCTATGCT GCATCCAGTT TGCAAAGTGG GGTCCCATCA
181 AGGTTCAGCG GCAGTGGATC TGGGACAGAG TTCACTCTCA CAATCAGCAG CCTGCAGCCT
241 GAAGATTTG CAACTTATTA CTGTCTACAG CATAATAGTT ACCCGTGGAC GTTCGGCCAA
301 GGGACCAAGG TGGAAATCAA AC (SEQ ID NO: 20)

Amino Acid Sequence of Light Chain Variable Region

1 DIQMTQSPSS LSASVGDRVT ITCRASQGIR NDLGWYQQKP GKAPKRLIYA ASSLQSGVPS
61 RFSGSGSGTE FTLTISSLQP EDFATYYCLQ HNSYPWTFGQ GTKVEIK
(SEQ ID NO: 18)

FIG. 10

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

11 / 36

ANTI-MUC18 ANTIBODY C3.45

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTTCAGC TGGTGCAGTC GGGAGCTGAG GTGAAGAAC CTGGGGCCTC AGTGAAGGTC
61 TCCTGCAAGG CTTCTGGTTA CACCTTTTT AGCTATGGTT TCAGCTGGGT GCGACAGGCC
121 CCTGGACAAG GGCTTGAGTG GCTGGGATGG ATCAGCGCTT ACAATGGTAA CACAAACTAT
181 GCACAGAAC C TCCAGGGCAG AGTCACCAG ACCACAGACA CTTCCACGAG CACAGCCTAC
241 ATGGAGCTGA GGAGCCTGAG ATCTGACGAC ACGGCCGTGT ATTACTGTGC GAGAGAAACT
301 AAGGTTCGGG GAGTCCACTA CTACGGTATG GACGTCTGGG GCCAAGGGAC CACGGTCACC
361 GTCTCCTCAG (SEQ ID NO: 23)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFF SYGFSWRQA PGQGLEWLGW ISAYNGNTNY
61 AQKLQGRVTM TTDTSTSTAY MELRSLRSDD TAVYYCARET KVRGVHYYGM DVWGQGTTVT
121 VSS (SEQ ID NO: 21)

Nucleotide Sequence of Light Chain Variable Region

1 DIVMTQSPDS LAVSLGERAT IICKSSQSIL YSSNNKNYLG WYQQKPGQPP KLLIYWASTR
61 ESGVPARFSG SGSGTDFTLT INSLQAEDVA VYYCQQYYST PRSFGQGTMV EIK (SEQ ID
NO: 24)

Amino Acid Sequence of Light Chain Variable Region

1 GACATCGTGA TGACCCAGTC TCCAGACTCC CTGGCTGTGT CTCTGGGCCA GAGGGCCACC
61 ATCATCTGCA AGTCAGCCA GAGTATTTA TACAGCTCCA ACAATAAGAA CTACTTAGGT
121 TGGTACCAGC AGAAACCAGG ACAGCCTCCT AAGCTGCTCA TTTACTGGGC ATCTACCCGG
181 GAATCCGGGG TCCCTGCCCG ATTCAAGTGGC AGCGGGTCTG GGACAGATT CACTCTCAC
241 ATCAAACAGCC TGCAAGGCTGA AGATGTGGCA GTTTATTACT GTCAGCAATA TTATAGTACT
301 CCTCGGTCGT TCGGCCAAGG GACCATGGTG GAAATCAAAC (SEQ ID NO 22)

FIG. 11

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

12 / 36

ANTI-MUC18 ANTIBODY C3.65

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGCAGGAGTC GGGCCCAGGA CTGGTGAAGC CTTCACAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAAC AGTGGTGGTT GCTACTGGAG CTGGATCCGC
121 CAGCACCCAG GGAAGGGCCT GGAGTGGATT GGGTACATCT ATTCCAGTGG GAGCACCTAC
181 TACAACCCGT CCCTCAAGAG TCGAATTACC TTATCAGTAG ACACGTCTAA GAACCAGTTC
241 TCCCTGAAGC TGAACCTAT GACTGCCGCG GACACGGCCG TGTATTACTG TGCGAGAGAT
301 CGGGAAACAG CTGGTTTGAG CTACTGGGGC CAGGGAACCC TGGTCACCGT CTCCTCAG
(SEQ ID NO: 27)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLQESGPG LVKPSQTL SL TCTVSGGSIN SGGCYWSWIR QHPGKGLEWI GYIYSSGSTY
61 YNPSLKSRI T LSVDTSKNQF SLKLNSMTAA DTAVYYCARD RETAGFDYWG QGTLVTVSS
(SEQ ID NO: 25)

Nucleotide Sequence of Light Chain Variable Region

1 GACATCCAGA TGACCCAGTC TCCATCCTCC CTGTCTGCAT CTGTAGGAGA CAGAGTCACC
61 ATCACTTGCC AGGCGAGTCA GGACATTAAC AACTATTAA ATTGGTATCA GCAGAAACCA
121 GGGAAAGCCC CTAAGCTCCT GATCTACGAT GCATCCAATT TGGAAACAGG GGTCCCATCA
181 AGGTTCACTG GAAGTGGATC TGGGACAGAT TTTACTTTCA CCATCAGCGG CCTGCAGCCT
241 GAGGATATTG CAACATATTA CTGTCAACAG TATGATACTC TCCCTCTCAC TTTCGGCGGC
301 GGGACCAAGG TGGAGATCAA AC (SEQ ID NO: 28)

Amino Acid Sequence of Light Chain Variable Region

1 DIQMTQSPS LSASVGDRVT ITCQASQDIN NYLNWYQQKP GKAPKLLIYD ASNLETGVPS
61 RFSGSGSGTD FTFTISGLQP EDIATYYCQQ YDTLPLTFGG GTKVEIK (SEQ ID NO: 26)

FIG. 12

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

13 / 36

ANTI-MUC18 ANTIBODY C6.1

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGGTGGAGTC GGGGGGAGGC GTGGTCCAGC CTGGGAGGTC CCTGAGACTC
61 TCCTGTGCAG CCTCTGGATT CACCTTCAGT AGCTATGCCA TGCACGGGT CCGCCAGGCT
121 CCAGGCAAGG GGCTGGAGTG GGTGGCAGTT ATATCATATG ATGGAAGTAA TAAATACTAT
181 GCAGACTCCG TGAAGGGCCG ATTCAACCATC TCCAGAGACA ATTCCAAGAA CACGCTGTAT
241 CTGCAAATGA ACAGCCTGAG AGCTGAGGAC ACGGCTGTGT ATTACTGTGC GAGATCGATT
301 TTTGGAGTGG TTATCGACTA CGGTATGGAC GTCTGGGCC AAGGGACCAC GGTACCCGTC
361 TCCTCAG (SEQ ID NO: 31)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVOLVESGGG VVQPGRLRL SCAASGFTFS SYAMHWVRQA PGKGLEWVAV ISYDGSNKYY
61 ADSVKGRFTI SRDNSKNLTY LQMNSLRAED TAVYYCARSİ FGVVIDYGMİ VWGQGTTVTV
121 SS (SEQ ID NO: 29)

Nucleotide Sequence of Light Chain Variable Region

1 GACATCCAGA TGACCCAGTC TCCATCCTCC CTGTCTGCAT CTGTAGGAGA CAGAGTCACC
61 ATCACTTGCC GGGCGAGTC GGGCATTAGA AATTATTTAG CCTGGTATCA GCAGAAATCCA
121 GGGAAAGTTC CTAAGCTCCT GATCTATGGT GCATCCACTT TGCAATCAGG GGTCCCATCT
181 CGGTTCAGTG GCAGTGGATC TGGGACAGAT TTCACTCTCA CCATCAGCAG CCTGCAGCCT
241 GAAGATGTTG CAACTTATTA CTGTCAAAAG TTTAGCAGTC CCCCATTACAC TTTCGGCCCT
301 GGGACCAAAG TGGATATCAG TC (SEQ ID NO: 32)

Amino Acid Sequence of Light Chain Variable Region

1 DIQMTQSPSS LSASVGDRVT ITCRASQGIR NYLAWYQQNP GKVPKLLIYG ASTLQSGVPS
61 RFSGSGSGTD FTLTSSLQP EDVATYYCQK FSSPPFTFGP GTKVDIS (SEQ ID NO: 30)

FIG. 13

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

14 / 36

ANTI-MUC18 ANTIBODY C6.9

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGGAGCAGTC GGGGCCAGGA CTGGTGAAGC CTTCAGAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAGC AGTGGTACTT ACCACTGGAG CTGGATCCGC
121 CAGCACCCAG GGAGGGGCCT GGAGTGGATT GGATACATCT ATTACAGTGG GAGCACCTAC
181 CACAACCCGT CCCTCAAGAG TCGAATTACC ATATCAGTAG ACACGTCTAA GAACCAAGTTC
241 TCCCTGAAGC TGAGCTCTGT GACGGCCGCG GACACGGCCG TGTATTACTG TGCAGAGAGGG
301 GGAGATGGCT ACAGATACTG GGGCCAGGGA ACCCTGGTCA CCGTCTCCTC AG
(SEQ ID NO: 35)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLEQSGPG LVKPSETLSL TCTVSGGSIS SGTYHWSWIR QHPGRGLEWI GYIYYSGSTY
61 HNPSLKSRIIT ISVDTSKNQF SLKLSSVTAA DTAVYYCARG GDGYRYWGQG TLTVVSS
(SEQ ID NO: 33)

Nucleotide Sequence of Light Chain Variable Region

1 GAAATAGTGA TGACGCAGTC TCCAGCCACC CTGTCTGTGT CTCCAGGGGA AAGAGCCACC
61 CTCTCCTGCA GGGCCAGTCA GAGTATTAGC AACAACTTCG CCTGGTACCA GCAGAAACCT
121 GGCCAGGCTC CCAGGCTCCT CATCTTGTT GCATCCACCA GGGCCACTGG TATCCCAGCC
181 AGGTTCAGTG GCAGTGGGTC TGGGACAGAA TTCACTCTCA CCATCAGCAG CCTACAGTCT
241 GAAGATTTG CAGTTTATTA CTGTCAGCAG TATAATAACT GCCCTCGGAC GTTCGGCCAA
301 GGGACCAAGG TGGAAATCAA AC (SEQ ID NO: 36)

Amino Acid Sequence of Light Chain Variable Region

1 EIVMTQSPAT LSVSPGERAT LSCRASQSIS NNFAWYQQKP GQAPRLLIFG ASTRATGIPA
61 RFSGSGSGTE FTLTISSLQS EDFAVYYCQQ YNNWPRTFGQ GTKVEIK (SEQ ID NO: 34)

FIG. 14

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

15 / 36

ANTI-MUC18 ANTIBODY C6.2

Nucleotide Sequence of Heavy Chain Variable Region

1 CAGGTGCAGC TGCAGGAGTC GGGCCAGGA CTGGTGAAGC CCTCGGAGAC CCTGTCCCTC
61 ACCTGCACTG TCTCTGGTGG CTCCATCAGT ACTTACTACT GGAGTTGGAT CGGGCAGGCC
121 CCAGGGAAGG GACTGGAGTG GATTGGATAC ATCTATTACA CTGGGAACAC CTACTACAAAC
181 CCCTCCCTCA AGAGTCGAGT CACCCTTCA GTTGACACGT CCAAGAACCA GTTCTCCCTG
241 AAGCTGAAC TCTGTGACCGC TGCGGACACG GCCGTGTATT ACTGTGCGAG AGATCCAGGC
301 CAGTGGCTGG TCCCTGATGC TTTTGATATC TGGGGCCAAG GGACAATGGT CTCCGTCTCT
361 TCAG (SEQ ID NO: 39)

Amino Acid Sequence of Heavy Chain Variable Region

1 QVQLQESGPG LVKPSETLSL TCTVSGGSIS TYYWSWIRQP PGKGLEWIGY IYYTGNLYYN
61 PSLKSRVTVS VDTSKNQFSL KLNSVTAADT AVYYCARDPG QWLVPDAFDI WGQGTMVSVS
121 S (SEQ ID NO: 37)

Nucleotide Sequence of Light Chain Variable Region

1 GATATTGTGA TGACTCAGTC TCCACTCTCC CTGCCCGTCA TTCCTGGAGA GCCGGCCTCC
61 ATCTCCTGCA GGTCTAGTCA GAGCCTCCTG CAGAGTAATG GAAACAACTA TTTGGATTGG
121 TACCTGCAGA AGCCAGGGCA GTCTCCACAG CTCCTGATCT ATTGGGGTTC TAATCGGGCC
181 TCCGGGGTCC CTGACAGGTT CAGTGGCAGT GGATCAGGCA CAGATTTAC ACTGAAAATC
241 AGCAGAGTGG AGGCTGACGA TGTTGGGATT TATTACTGCA TGCAAGCTCT CCAAATTCC
301 CTCACTTTCG GCGGAGGGAC CAAGGTGGAG ATCAAAC (SEQ ID NO: 40)

Amino Acid Sequence of Light Chain Variable Region

1 DIVMTQSPLS LPVIPGEPAS ISCRSSQSLL QSNGNNYLDW YLQKPGQSPQ LLIYLGSNRA
61 SGVPDRFSGS GSGTDFTLKI SRVEADDVGI YYCMQALQIP LTFGGGTKVE IK
(SEQ ID NO: 38)

FIG. 15

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

16 / 36

	Section 1				
	1	10	20	30	40
A15-3.10 HC	(1)	QVQLQESGPGLVVKPSETLSLTCTVSGGSISSYYWSWIRQP	PCKGLEWIGYIYY		
VH4-59	(1)	QVQLQESGPGLVVKPSETLSLTCTVSGGSISSYYWSWIRQP	PCKGLEWIGYIYY		
Consensus	(1)	QVQLQESGPGLVVKPSETLSLTCTVSGGSISSYYWSWIRQP	PCKGLEWIGYIYY		
	Section 2				
	54	60	70	80	90
A15-3.10 HC	(54)	WTNTYNPNSLKSRRVTISVDTSKRNQFS14P1ISSVTAADT	TANYYCAR	DQGQWLIPD	
VH4-59	(54)	WTNTYNPNSLKSRRVTISVDTSKRNQFS14P1ISSVTAADT	TANYYCAR	DQGQWLIPD	
Consensus	(54)	STNYPNSLKSRRVTISVDTSKRNQFS14P1ISSVTAADT	TANYYCAR	DQGQWLIPD	
	Section 3				
	107	107	121		
A15-3.10 HC	(107)	AFDIWGQGTMVTVSS			
VH4-59	(98)				
Consensus	(107)				

positives: 79.3%	identity: 76.0%
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FIG. 16

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

17 / 36

	Section 1			
	1	10	20	30
A15-3.10_LC	(1) DIQMTQSPSSLSASVGDRVTITCRASQTSISNYLNWYQQKPGKAPKLLIYASS			
O2	(1) DIQMTQSPSSLSASVGDRVTITCRASQTSISYYLNWYQQKPGKAPKLLIYASS			
Consensus	(1) DIQMTQSPSSLSASVGDRVTITCRASQTSIS YLNWYQQKPGKAPKLLIYASS			
	Section 2			
	54	60	70	80
A15-3.10_LC	(54) LQSGVPSRFSGSGSGTDFLTTLQPEDFATYYC			
O2	(54) LQSGVPSRFSGSGSGTDFLTTLQPEDFATYYC			
Consensus	(54) LQSGVPSRFSGSGSGTDFLTTLQPEDFATYYC			
	Section 3			
	107	107		
A15-3.10_LC	(107) EIK			
O2	(96) ---			
Consensus	(107)			

positives: 85.3%	identity: 84.4%
------------------	-----------------

FIG. 17

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030CI

18 / 36

	Section 1			
	10	20	30	40
A15-3.22 HC	(1) QVQQLQESGPGLVYKPSQTLISLTCTVSGGSISSGGYYNTWIRQHPGKGLENTGTY			
VH4-31	(1) QVQQLQESGPGLVYKPSQTLISLTCTVSGGSISSGGYYNTWIRQHPGKGLENTGTY			
Consensus	(1) QVQQLQESGPGLVYKPSQTLISLTCTVSGGSISSGGYYNTWIRQHPGKGLENTGTY			

	Section 2			
	50	60	70	80
A15-3.22 HC	(54) YYSGSTYYNPSLKSRYTISVDTTSKNQFSLKLSSVTAADTAVYYCAREGDGF DY			
VH4-31	(54) YYSGSTYYNPSLKSRYTISVDTTSKNQFSLKLSSVTAADTAVYYCAREGDGF DY			
Consensus	(54) YYSGSTYYNPSLKSRYTISVDTTSKNQFSLKLSSVTAADTAVYYCAREGDGF DY			

	Section 3			
	107	117		
A15-3.22 HC	(107) WGQGTIVTVSS			
VH4-31	(100)			
Consensus	(107)			

positives: 84.6% | identity: 82.9%

FIG. 18

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

19 / 36

	Section 1			
	1	10	20	30
A15-3.22_LC	(1)	DIQMTQSPSSLSASVGDRVTITCRASQGIRNDLGWYQQKPGKAPKR	LIAASS	53
A30	(1)	DIQMTQSPSSLSASVGDRVTITCRASQGIRNDLGWYQQKPGKAPKR	LIAASS	
Consensus	(1)	DIQMTQSPSSLSASVGDRVTITCRASQGIRNDLGWYQQKPGKAPKR	LIAASS	

	Section 2			
	54	60	70	80
A15-3.22_LC	(54)	LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYP	PLTFGGGTKEI	106
A30	(54)	LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYP	-----	
Consensus	(54)	LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYP	-----	

	Section 3			
	107	107	107	107
A15-3.22_LC	(107)	K		
A30	(96)	-		
Consensus	(107)			

positives: 88.8% | identity: 88.8%

FIG. 19

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

20 / 36

	Section 1			
	10	20	30	40
A15-3.27 HC	(1) QYQLOESGPGLVVKPSETLSLTCTVSGGSISSYYWNSMIROPPEPGKGLEWIGIYY			
VH4-59	(1) QYQLOESGPGLVVKPSETLSLTCTVSGGSISSYYWNSMIROPPEPGKGLEWIGIYY			
Consensus	(1) QVQLQESGPGLVVKPSETLSLTCTVSGGSISSYYWNSMIROPPEPGKGLEWIGIYY			

	Section 2			
	50	60	70	80
A15-3.27 HC	(54) WTSNNYNPSLKSRTVTISVDTSKNQFSIKLSSSVTAADTAVYYCAR			
VH4-59	(54) SGSTTNNYNPSLKSRTVTISVDTSKNQFSIKLSSSVTAADTAVYYCAR			
Consensus	(54) S SSNNYNPSLKSRTVTISVDTSKNQFSIKLSSSVTAADTAVYYCAR			

	Section 3			
	107	107	121	
A15-3.27 HC	(107) AFDIWGQGTMVTVSS			
VH4-59	(98)			
Consensus	(107)			

positives: 79.3% | identity: 76.0%

FIG. 20

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

21 / 36

	Section 1			Section 2			Section 3		
	1	10	20	30	40	50	53	54	106
A15-3.27_LC	(1)	DIQMTQSPSSLSASVGD	RVTITCRASQGIRNDL	GWYQQKPGKA	PKRLYAASS				
	(1)	DIQMTQSPSSLSASVGD	RVTITCRASQGIRNDL	GWYQQKPGKA	PKRLYAASS				
A30	(1)	DIQMTQSPSSLSASVGD	RVTITCRASQGIRNDL	GWYQQKPGKA	PKRLYAASS				
Consensus	(1)	DIQMTQSPSSLSASVGD	RVTITCRASQGIRNDL	GWYQQKPGKA	PKRLYAASS				
A15-3.27_LC	(54)	54	60	70	80	90	90	90	106
	(54)	LQSGVPSRFSGSGSGT	EFATYYCLQPEDEATYYC	LQPEDEATYYCLQPEDE	ATYYCLQPEDEATYYCL	QHNSYPWTFGQG	QHNSYPWTFGQG	QHNSYPWTFGQG	QHNSYPWTFGQG
A30	(54)	LQSGVPSRFSGSGSGT	EFATYYCLQPEDEATYYC	LQPEDEATYYCLQPEDE	ATYYCLQPEDEATYYCL	QHNSYP-----	QHNSYP-----	QHNSYP-----	QHNSYP-----
Consensus	(54)	LQSGVPSRFSGSGSGT	EFATYYCLQPEDEATYYC	LQPEDEATYYCLQPEDE	ATYYCLQPEDEATYYCL	QHNSYP-----	QHNSYP-----	QHNSYP-----	QHNSYP-----
A15-3.27_LC	(107)	107							
	(107)	K							
A30	(96)	-							
Consensus	(107)								

positives: 88.8%	identity: 88.8%
------------------	-----------------

FIG. 21

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030CI

22 / 36

	Section 1			
	1	10	20	30
A15-3.45 HC	(1) QVQLVQSGAEVKPGASVKVSCKASGYTF			
VH1-18	(1) QVQLVQSGAEVKPGASVKVSCKASGYTF			
Consensus	(1) QVQLVQSGAEVKPGASVKVSCKASGYTF			

	Section 2			
	54	60	70	80
A15-3.45 HC	(54) YNGNTNYAQKILQGRVTMTTDTSTS			
VH1-18	(54) YNGNTNYAQKILQGRVTMTTDTSTS			
Consensus	(54) YNGNTNYAQKILQGRVTMTTDTSTS			

	Section 3			
	107	123	123	106
A15-3.45 HC	(107) YYGMDVWGQGTTVTVSS			
VH1-18	(99) -----			
Consensus	(107)			

positives: 78.0%	identity: 77.2%
------------------	-----------------

FIG. 22

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030CI

23 / 36

	Section 1			
	10	20	30	40
A15-3.45_LC	(1) DIVMTQSPDSLAVSLGERATI	TICKSSQST	LYS SNNKNYL	GWYQQKPGOPPKLL
B3	(1) DIVMTQSPDSLAVSLGERATI	TICKSSQST	LYS SNNKNYL	GWYQQKPGOPPKLL
Consensus	(1) DIVMTQSPDSLAVSLGERATI	CKSSQSTLYS SNNKNYL	LYS SNNKNYL	GWYQQKPGOPPKLL
	Section 2			
	50	60	70	80
A15-3.45_LC	(54) TYWASTRESGVPARFSGSGTDETITI	NSLQAEDVAVYYCQQYYST	PFRSFGQ	
B3	(54) TYWASTRESGVPDRESSGSGTDETITI	NSLQAEDVAVYYCQQYYST	PFRSFGQ	---
Consensus	(54) TYWASTRESGVPRFSGGSGTDFITI	SIQAEDVAVYYCQQYYSTP		---
	Section 3			
	90	100	110	106
A15-3.45_LC	(107) GTMVEIK			
B3	(102)			---
Consensus	(107)			

positives: 86.7%	identity: 85.0%
------------------	-----------------

FIG. 23

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

24 / 36

	Section 1			
	10	20	30	40
A15-3.65 HC VH4-31	(1) 6YQLESGPGLVKPQSOTLSLTCTVSGGSTI (1) QYQLESGPGLVKPQSOTLSLTCTVSGGSTI (1) QYQLESGPGLVKPQSOTLSLTCTVSGGSTI			
Consensus	(1) QVQLQESGPGLVKPQSOTLSLTCTVSGGSTI			
				53
	Section 2			
	54	60	70	80
A15-3.65 HC VH4-31	(54) YSSGSTYYNPSLKSRLI (54) YSSGSTYYNPSLKSRLI (54) YSSGSTYYNPSLKSRLI			
Consensus	(54) Y SGSTYYNPSLKSRLITSVDTSKNQFSLKL			
				90
				106
	Section 3			
	107	107	119	
A15-3.65 HC VH4-31	(107) DYWGQGTIVTVSS (100) -----			
Consensus	(107)			

positives: 79.8% | identity: 77.3%

FIG. 24

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

25 / 36

		Section 1				
		10	20	30	40	53
A15-3.65_LC	(1)	DIQMTQSPSSLSASVGDRVTITCQASQDI	NNYLNWYQQKPGKAPKLLIYDASN			
O8	(1)	DIQMTQSPSSLSASVGDRVTITCQASQDI	NNYLNWYQQKPGKAPKLLIYDASN			
Consensus	(1)	DIQMTQSPSSLSASVGDRVTITCQASQDI	NNYLNWYQQKPGKAPKLLIYDASN			
		Section 2				
		54	60	70	80	90
A15-3.65_LC	(54)	LETGVPSRFSQSGSGTDFFTFTIS	GLQPEDIATYYCQQYDTHPLTFGGGTKEI			
O8	(54)	LETGVPSRFSQSGSGTDFFTFTIS	GLQPEDIATYYCQQYDTHPLTFGGGTKEI			
Consensus	(54)	LETGVPSRFSQSGSGTDFFTFTIS	GLQPEDIATYYCQQYDTHPLTFGGGTKEI			
		Section 3				
		107	107	107	107	106
A15-3.65_LC	(107)	K				
O8	(96)	-				
Consensus	(107)					

positives: 86.0% | identity: 86.0%

FIG. 25

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

26 / 36

	Section 1			
	1	10	20	30
A15-6.1 HC	(1)	GGGIVQPGRSRLSCAASGFTFSSYAMHHWVRQAPGKGLEWVAVTSY		
VH3-30	(1)	QVQLVE.SCGGWVQPGRSRLSCAASGFTFSSYGMHHWVRQAPGKGLEWVAVTSY		
Consensus	(1)	QVQLVESGGVVQPGRSIRLSCAASGFTFSSYAMHHWVRQAPGKGLEWVAVTSY		
	Section 2			
	54	60	70	80
A15-6.1 HC	(54)	DGSNKYYADSVRKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAR		
VH3-30	(54)	DGSNKYYADSVRKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAR		
Consensus	(54)	DGSNKYYADSVRKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAR		
	Section 3			
	107	107	122	
A15-6.1 HC	(107)	YGMIDVWGQGTTTVSS		
VH3-30	(99)			
Consensus	(107)			

positives: 80.3%	identity: 79.5%
------------------	-----------------

FIG. 26

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

27 / 36

		Section 1											
		1	10	20	30	40	50	54					
A15-6.1 LC	(1)	D	I	Q	M	T	O	S	P	S	S	I	S
A20	(1)	D	I	Q	M	T	Q	S	P	S	S	I	S
Consensus	(1)	D	I	Q	M	T	Q	S	P	S	S	I	S

		Section 2											
		55	60	70	80	90	100	107					
A15-6.1 LC	(55)	Q	S	G	V	P	S	R	F	S	G	S	G
A20	(55)	Q	S	G	V	P	S	R	F	S	G	S	G
Consensus	(55)	Q	S	G	V	P	S	R	F	S	G	S	G

positives: 85.0%	identity: 83.2%
------------------	-----------------

FIG. 27

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

28 / 36

	Section 1				
	10	20	30	40	53
A15-6.12 HC	(1) QVQLEQSGPGLVVKPSETLSLTCTVSGGSTSSGTYHWSWIROHPGRGLEWIGYI				
VH4-31	(1) QVQLEQSGPGLVVKPSQTLSLTCTVSGGSTSSGGYHWSWIROHPGRGLEWIGYI				
Consensus	(1) QVQL SGPGGLVVKPS TLSLTCTVSGGSTSSG YHWWSWIROHPGKGLEWIGYI				
	Section 2				
	54	60	70	80	90
A15-6.12 HC	(54) YYSGSTYINPSIHKSPRTISVDTSKNQFSIKLSSVTAADTAVYYCARGGDGYRY				
VH4-31	(54) YYSGSTYVVPSPSIKSRRTISVDTSKNQFSIKLSSVTAADTAVYYCAR-----				
Consensus	(54) YYSGSTYHVPSIHKSRITISVDTSKNQFSIKLSSVTAADTAVYYCAR				
	Section 3				
	107	107	117		
A15-6.12 HC	(107) WGQGTIVTVSS				
VH4-31	(100) -----				
Consensus	(107)				

positives: 81.2% | identity: 77.8%

FIG. 28

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

29 / 36

	Section 1			
	10	20	30	40
L2	(1) EIVMTQSPATLSVSPGERATLSCRASQSTS N			
A15-6.12_LC	(1) EIVMTQSPATLSVSPGERATLSCRASQSTS N			
Consensus	(1) EIVMTQSPATLSVSPGERATLSCRASQSTS N			

	Section 2			
	54	60	70	80
L2	(54) RATGIPARFSGSGSGTEFTLTISIQLQSEDFAVYYCQQYNNWP			
A15-6.12_LC	(54) RATGIPARFSGSGSGTEFTLTISIQLQSEDFAVYYCQQYNNWP			
Consensus	(54) RATGIPARFSGSGSGTEFTLTISIQLQSEDFAVYYCQQYNNWP			

	Section 3			
	107	107	107	106
L2	(107)	107		
A15-6.12_LC	(96)	-		
Consensus	(107)	K		

positives: 86.9% | identity: 85.0%

FIG. 29

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABCENIX.030C1

30 / 36

	Section 1			
	10	20	30	40
A15-6.2 HC	(1) QVQLQESGPGLVKPSETLSITCTVSGGSISTYYWNSWIROPPGKGLEWIGYIYY			
VH4-59	(1) QVQLQESGPGLVKPSETLSITCTVSGGSISTYYWNSWIROPPGKGLEWIGYIYY			
Consensus	(1) QVQLQESGPGLVKPSETLSITCTVSGGSISTYYWNSWIROPPGKGLEWIGYIYY			

	Section 2			
	60	70	80	90
A15-6.2 HC	(54) TGNTYYNPSLKSRLVTV	SVDTTSKKNQFSIILKLN	SVDTTSKKNQFSIILKLN	SVDTTSKKNQFSIILKLN
VH4-59	(54) SGS2NYYNPSLKSRLVTV	SVDTTSKKNQFSIILKLN	SVDTTSKKNQFSIILKLN	SVDTTSKKNQFSIILKLN
Consensus	(54) SG T YNPSLKSRLVTV	SVDTTSKRNQFSIILKLN	SVDTTSKRNQFSIILKLN	SVTAADTAAYYYCAR

	Section 3			
	107	121		
A15-6.2 HC	(107) AFDIWGQGTMVSVSS			
VH4-59	(98)			
Consensus	(107)			

positives: 77.7% | identity: 75.2%

FIG. 30

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

31 / 36

	Section 1					
	1	10	20	30	40	54
A15-6.2_LC	(1) DIVMTQSPSPLPV	IPGE PASISCRSSQSII	LSNG NMYLQKPGOSPQLIY			
(1) DIVMTQSPSPLPV	IPGE PASISCRSSQSII	HSNG YNYLQKPGOSPQLIY				
(1) A19	IPGE PASISCRSSQSII					
Consensus	(1) DIVMTQSPSPLPV	PGE PASISCRSSQSII	SNG NYLDWYLQKPGOSPQLIY			

	Section 2					
	55	60	70	80	90	108
A15-6.2_LC	(55) LGSNRASGVVPDRFSGSGSGT	DFTILKISRVEADDV	GCGYYCMQALQI	PLTFGGGT		
(55) A19	LSGNRASGVVPDRFSGSGSGT	DFTILKISRVEADDV	GCGYYCMQALQI	PLTFGGGT		
(55)						
Consensus	(55) LGSNRASGVVPDRFSGSGSGT	DFTILKISRVEADDV	GTYYYCMQALQI	PLTFGGGT		

	Section 3					
	109	112				
A15-6.2_LC	(109) VEIK					
(109) A19	(101)	---				
Consensus	(109)					

positives: 85.7%	identity: 83.9%
------------------	-----------------

FIG. 31

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

32 / 34

		Section 1				
		10	20	30	40	53
A15-6.9 HC	(1)	LEQSGPGLVVKPSEITLSITCTVSGGSISSGTYWMSWIROHPGRGLEWIGYI				
VH4-31	(1)	QVQLQESGPGLVVKPSQTLSITCTVSGGSISSGGYKWSWIROHPGKGSLEWIGYI				
Consensus	(1)	QVQL SGPGILVVKPS TLSLTCTVSGGSISSG YYWSWIROHPGKGLEWIGYI				
		Section 2				
		54	60	70	80	90
A15-6.9 HC	(54)	YYSGSTYHNPSSLKSRITISVDTSSKNOFSIKLSSVTAAADTAVYYCAR				
VH4-31	(54)	YYSGSTYHNPSSLKSRITISVDTSSKNOFSIKLSSVTAAADTAVYYCAR				
Consensus	(54)	YYSGSTYHNPSSLKSRITISVDTSSKNOFSIKLSSVTAAADTAVYYCAR				
		Section 3				
		107	107	117		
A15-6.9 HC	(107)	WGQGTLVTVSS				
VH4-31	(100)					
Consensus	(107)					

positives: 81.2% | identity: 77.8%

FIG. 32

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABCGENIX.030CI

33 / 36

	Section 1										Section 2									
	1	10	20	30	40	54	1	10	20	30	40	54	1	10	20	30	40	54		
A15-6.9_LC	(1)	ETVMTQSPATLSVSPGERATLSCRASQTS	SSNNFAWYQQKPGQAPRLLI	NGASTR			(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP		(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP		(107)	
L2	(1)	ETVMTQSPATLSVSPGERATLSCRASQTS	SSNNIAWYQQKPGQAPRLLI	NGASTR			(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP		(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP			
Consensus	(1)	ETVMTQSPATLSVSPGERATLSCRASQTS	NNFAWYQQKPGQAPRLLI	NGASTR			(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP		(55)	ATGIPARFSGSGSGT	EEFTLTIS	SSLO	EDFAVYYCQQYNNWP			

positives: 86.9%	identity: 85.0%
------------------	-----------------

FIG. 33

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

34 / 36

	Section 1				
	1	10	20	30	
A15-6.11_HC	(1)	QVQLQESGPGLVVKPSQTLSSLTCTVSGCSISSGTYHWTWIRQHPGKGLEWIGFTI			40
VH4-31	(1)	QVQLQESGPGLVVKPSQTLSSLTCTVSGCSISSGGYXWSWIRQHPGKGLEWIGFTI			53
Consensus	(1)	QVQLQESGPGLVVKPSQTLSSLTCTVSGCSISSG YHWSWIRQHPGKGLEWIGFTI			

	Section 2				
	54	60	70	80	
A15-6.11_HC	(54)	YYSGSTYYNPSLKSRSVTISVDTTSKNQFSLKLSSSVTAADTAVYYCAR GGDGYKY			90
VH4-31	(54)	YYSGSTYYNPSLKSRSVTISVDTTSKNQFSLKLSSSVTAADTAVYYCAR -----			106
Consensus	(54)	YYSGSTYYNPSLKSRSVTISVDTTSKNQFSLKLSSSVTAADTAVYYCAR			

	Section 3				
	107	107	117		
A15-6.11_HC	(107)	WGQGTIVTVSS			
VH4-31	(107)	-----			
Consensus	(107)				

positives: 83.8% | identity: 82.9%

FIG. 34

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

35 / 36

		Section 1			Section 2			Section 3			
		10	20	30	40	50	60	70	80	90	106
A15-6.11_LC	(1)	EIVMTQSPATLSVSPGERATLSCRASOSVSNINLAWYQQKPGOAPRLLIYGAST									
L2	(1)	EIVMTQSPATLSVSPGERATLSCRASOSVSNINLAWYQQKPGOAPRLLIYGAST									
Consensus	(1)	EIVMTQSPATLSVSPGERATLSCRASOSVSNINLAWYQQKPGOAPRLLIYGAST									
A15-6.11_LC	(54)	RATGIPARFSGSGSGTTEFTLTISSLQSEDFAVYYCQQYNNWP									
L2	(54)	RATGIPARFSGSGSGTTEFTLTISSLQSEDFAVYYCQQYNNWP									
Consensus	(54)	RATGIPARFSGSGSGTTEFTLTISSLQSEDFAVYYCQQYNNWP									
A15-6.11_LC	(107)										
L2	(107)	K									
Consensus	(96)	-									

positives: 87.9% | identity: 87.9%

FIG. 35

USE OF ANTIBODIES AGAINST THE MUC18 ANTIGEN

Bar-Eli, et al.

Appl. No.: 10/660,357 Atty Docket: ABGENIX.030C1

Clone #	VH	#del	VH End	#N's	N Sequence	DH	Size of D	D Sequence	#N's	N Sequence	JH	#del	JH Segment
A15-3.10	DP-71/4-59	0	GAGAGA	8	TCAGGGGC	D21-9	8	AGTGGTTA	7	CTACCCG	JH3B	0	ATGCTT
A15-3.22	DP-65/4-31	0	GAGAGA	9	GGGAGATGG	-	-	-	-	-	JH4B	-4	CTTGAA
A15-3.27	DP-71/4-59	0	GAGAGA	8	TCAGGGGC	D21-9	8	AGTGGTTA	7	CTACCCG	JH3B	0	ATGCTT
A15-3.45	DP-14/1-18	0	GAGAGA	6	AACTAA	D3-10	12	GGTTCGGGGAGT	2	CC	JH6B	-9	ACTACT
A15-3.65	DP-65/4-31	0	GAGAGA	8	TCGGGAAA	D6-13	8	CAGCTGGT	4	TTTT	JH5A	-11	GACTAC
A15-6.1	DP-49/3-30	3	GAGAGA	1	T	D3-3	18	CGATTTTGGAGTGGTTA	3	TCG	JH6B	-12	ACTACG
A15-6.2	DP-71/4-59	0	GAGAGA	7	TCCAGGGC	D6-19	11	CAGTGGCTGGT	5	CCTG	JH3B	0	ATGCTT
A15-6.9	DP-65/4-31	1	CGAGAG	3	GGG	D5-24	11	GAGATGGCTAC	4	AGAT	JH1	-16	ACTGGG
A15-6.11	DP-65/4-31	1	CGAGAG	3	GGG	D5-24	13	GAGATGGCTACAA	2	GT	JH1	-16	ACTGGG
A15-6.12	DP-65/4-31	1	CGAGAG	3	GGG	D5-24	11	GAGATGGCTAC	4	AGAT	JH1	-16	ACTGGG

36 / 36

Clone #	VK	#del	VH End	#N's	N Sequence	JK	#del	JK end
A15-3.10	02/012/DPK	0	CCCTCC	9	GGAGTGCAG	JK2	-7	TTTTGG
A15-3.22	A30	3	TTACCC	0	0	JK4	0	GCTCAC
A15-3.27	A30	3	TTACCC	0	0	JK1	0	GTGGAC
A15-3.45	B3/DPK24	1	TCCCCC	3	GGT	JK1	-5	CGTTCG
A15-3.65	08/018/DPK	1	TCCCCC	0	0	JK4	-2	TCACTTC
A15-6.1	A20/DPK4	3	GTCCCC	0	0	JK3	0	ATTCAC
A15-6.2	A3/A19/DPK	1	TTCCCT	0	0	JK4	-2	TCACTTC
A15-6.9	L2/DPK21	1	GGCCTC	0	0	JK1	-2	GGACGTT
A15-6.11	L2/DPK21	1	GGCCTC	0	0	JK1	-2	GGACGTT
A15-6.12	L2/DPK21	1	GGCCTC	0	0	JK1	-2	GGACGTT

F/G. 36